

# Laparoscoendoscopic single-site cholecystectomy and occult gallbladder cancer

Pascal Bucher · François Pugin · Philippe Morel

Published online: 7 January 2010  
© Springer Science+Business Media, LLC 2010

Dear Sir,

We read with interest the article by Gibbs and Kaleya [1] on the accidental discovery of gallbladder cancer during single-incision laparoscopic cholecystectomy. We comment on this issue considering a case of occult T3 gallbladder carcinoma managed through laparoendoscopic single-site surgery (LESS) with regard to specific issues of these developing single-access surgeries [LESS and natural orifice transluminal endoscopic surgery (NOTES)].

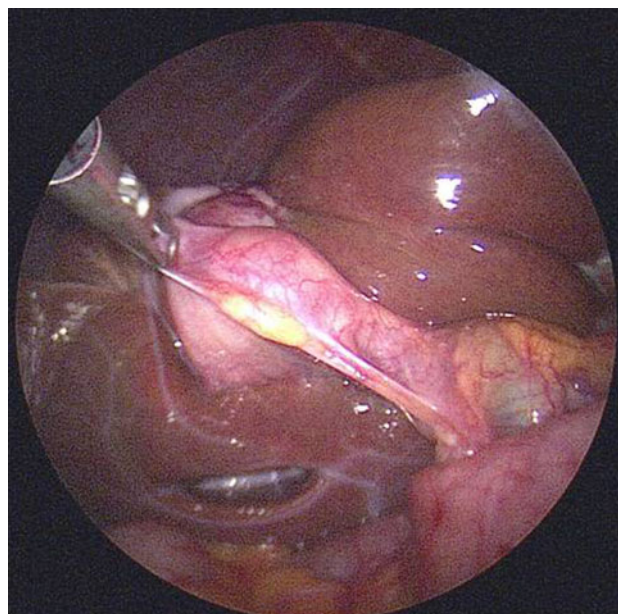
Recently, a 66-year-old woman with a history of symptomatic gallbladder stones was treated with LESS cholecystectomy (Fig. 1). Gallbladder retraction was achieved without sling suture, and no bile spillage occurred. Pathologic examination showed a T3N1 gallbladder carcinoma, and the woman was offered a radical resection. At this writing, she has recovered well.

This case and the article by Gibbs and Kaleya [1] urge us to consider some general principles established for cholecystectomy due to the risk of occult gallbladder cancer. History has shown us that surgical principles should be respected, especially for cholecystectomy in terms of biliary tract lesions and dramatic oncologic results for occult gallbladder carcinoma at the introduction of laparoscopy [2, 3]. Although the risk of gallbladder cancer accounts for only 0.2–2.9% of all cholecystectomies, [4] these principles should be strictly followed.

The first surgical principle is to avoid bile spillage. Many groups have violated this principle by performing

single-access cholecystectomy though placement of a sling suture (as we did during our preliminary experience [5]) or other transparietal device for exposition. This practice should now be avoided, which is made easier by the use of the newly developed multiport and instrumentation [3, 6, 7]. When exposition still remains a challenge, as could happen with patients who have a high body mass index (BMI), additional port placement should be strongly recommended and probably is safer. Is a 5-mm port scar worse than the risk of gallbladder carcinoma spillage?

The second surgical principle dictates that the gallbladder specimen should be extracted from the abdominal



**Fig. 1** Intraoperative view during LESS cholecystectomy in a case of occult gallbladder T3 carcinoma

P. Bucher (✉) · F. Pugin · P. Morel  
Department of Surgery, University Hospital Geneva,  
24 rue Micheli-du-Crest, 1211 Geneva, Switzerland  
e-mail: pascal.bucher@hcuge.ch

cavity to prevent its contact with the wound, which has been associated with port-site metastases [2]. For this purpose, specimen bags should always be used or a port with a wound protector included, such as the ASC Triport (ASC, Bray, Ireland) [3].

In summary, as we embark on an era of even more minimally invasive or scarless surgery, we should not discard all the surgical principles that have been held in esteem. We should first, as Hippocrates recommended more than 2,000 years ago, do no harm to our patients. This implies following the principles that we know could prevent us from doing so. This is of major importance because the diffusion of these new approaches, especially LESS, is progressing fast, probably driven by the industry, and surgeons will start to perform cases following techniques of the pioneers.

**Disclosures** Pascal Bucher, Francois Pugin, and Philippe Morel have no conflicts of interest or financial ties to disclose.

## References

1. Gibbs KE, Kaleya RN (2009) Incidental gallbladder cancer and single-incision laparoscopic cholecystectomy. *Surg Endosc* 23:1680
2. Goetze T, Paolucci V (2006) Does laparoscopy worsen the prognosis for incidental gallbladder cancer? *Surg Endosc* 20:286–293
3. Bucher P, Pugin F, Morel P (2010) From single-port access to laparoendoscopic single-site cholecystectomy. *Surg Endosc* 24:234–235
4. Goetze T, Paolucci V (2008) Benefits of reoperation of T2 and more advanced incidental gallbladder carcinoma: analysis of the German registry. *Ann Surg* 247:104–108
5. Bucher P, Pugin F, Buchs N, Ostermann S, Charara F, Morel P (2009) Single-port access laparoscopic cholecystectomy (with video). *World J Surg* 33:1015–1018
6. Langwieler TE, Nimmesgern T, Back M (2009) Single-port access in laparoscopic cholecystectomy. *Surg Endosc* 23:1138–1141
7. Bucher P, Pugin F, Morel P (2009) Scarless surgery: reality through umbilical laparoendoscopic single-site surgery (LESS)? *Rev Med Suisse* 5:1412–1415